

FIG. 1



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Mote 6A: SENSING INDEX			
Light Device	Light Device Information Available	Query Command Format	Output Format
Electrical/Magnetic Device	Electrical/Magnetic Device Information Available	Query Command Format	Output Format
Pressure Device	Pressure Device Information Available	Query Command Format	Output Format
Temperature Device	Temperature Device Information Available	Query Command Format	Output Format
Volume Device	Volume Device Information Available	Query Command Format	Output Format
Inertial Device	Inertial Device Information Available	Query Command Format	Output Format
Antenna	Antenna Information Available	Query Command Format	Output Format

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Mote 6A: CONTROL INDEX			
Light Sensor	Light Device Commands Available	Control Command Format	Feedback Format
Electrical/Magnetic Device	Electrical/Magnetic Device Commands Available	Control Command Format	Feedback Format
Pressure Device	Pressure Device Commands Available	Control Command Format	Feedback Format
Temperature Device	Temperature Device Commands Available	Control Command Format	Feedback Format
Volume Device	Volume Device Commands Available	Control Command Format	Feedback Format
Inertial Device	Inertial Device Commands Available	Control Command Format	Feedback Format
Antenna	Antenna Commands Available	Control Command Format	Feedback Format

FIG. 3

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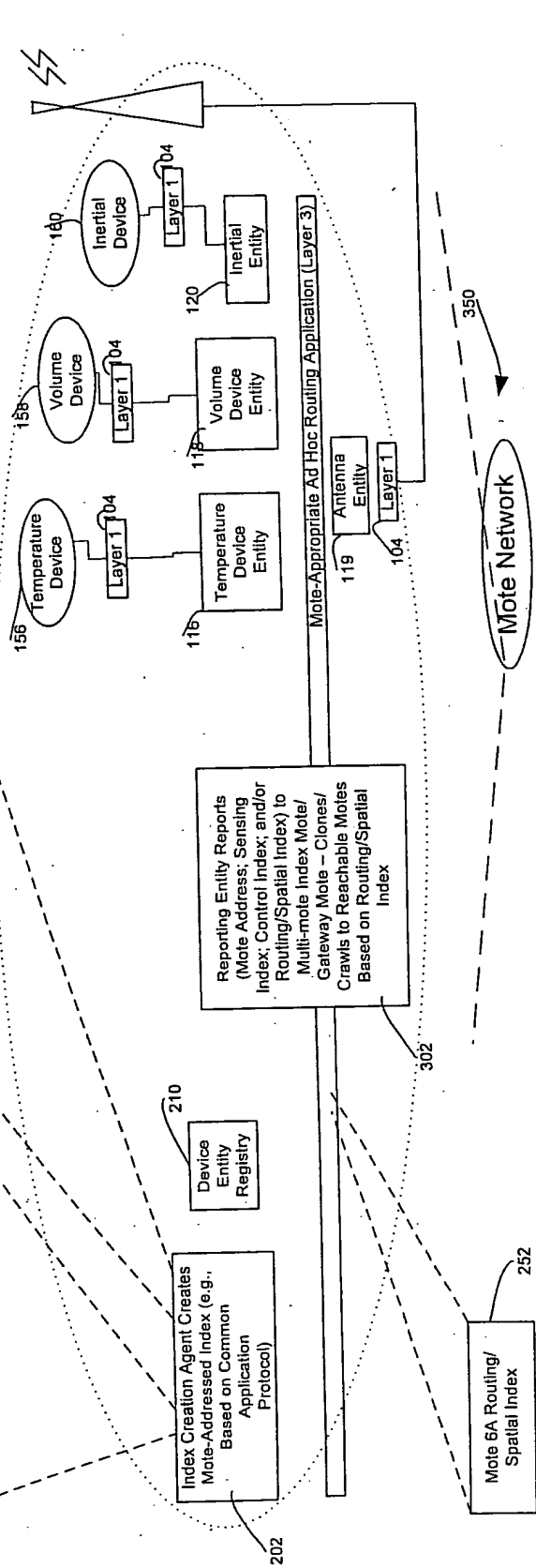
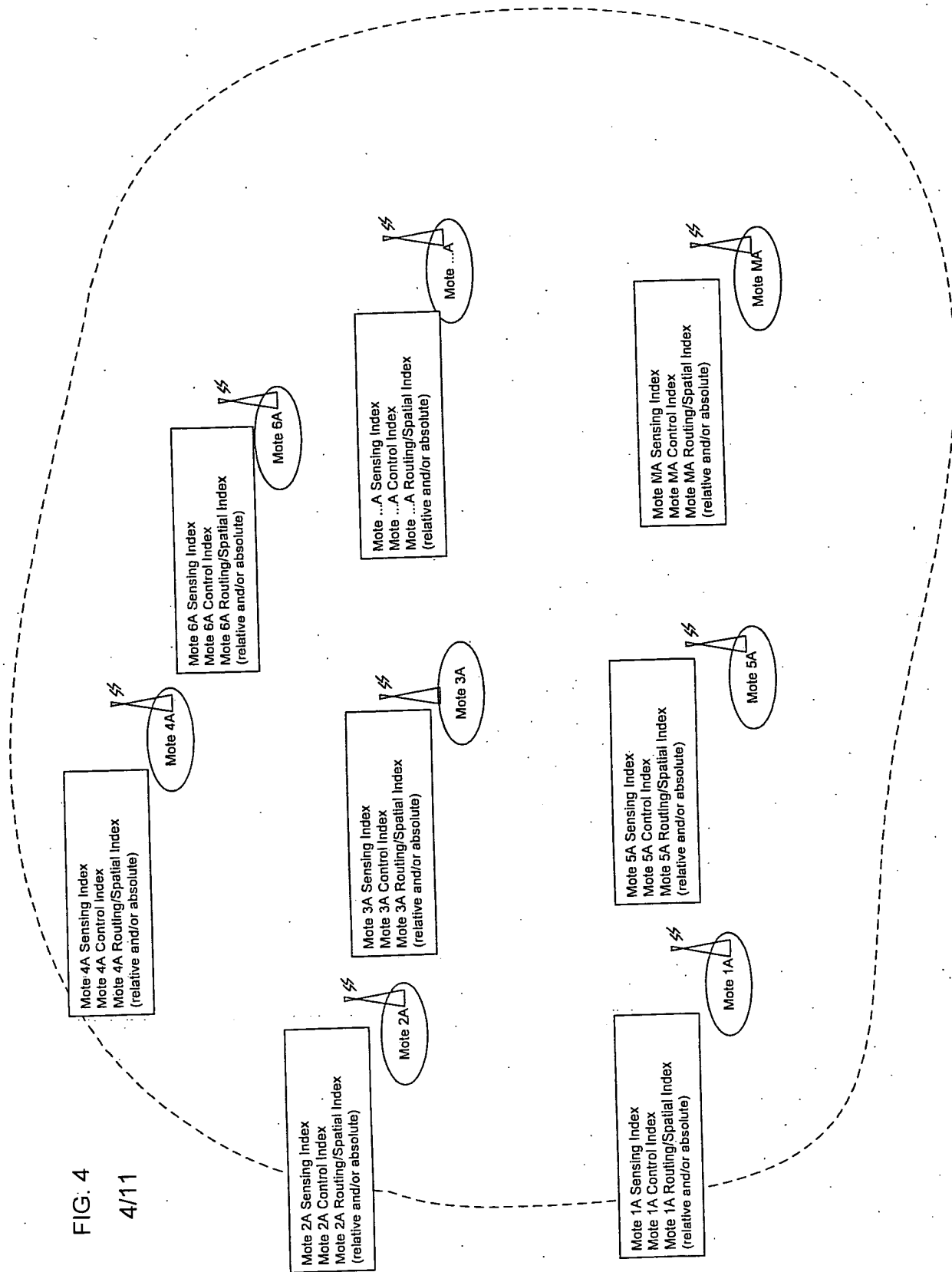


FIG. 4

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MULTI-MOTE INDEX ENTRY FOR MOTE ADDRESS 1A CONTENT INDEXES				MULTI-MOTE INDEX ENTRY FOR MOTE ADDRESS 3A CONTENT INDEXES			
MOTE 1A: SENSING INDEX				MOTE 3A: SENSING INDEX			
Light Device	Light Device Information Available	Query Command Format	Output Format	Pressure Device	Pressure Device Information Available	Query Command Format	Output Format
Electrical/ Magnetic Device	Electrical/ Magnetic Device Information Available	Query Command Format	Output Format	Temp. Device	Temp. Device Information Available	Query Command Format	Output Format
Inertial Device	Inertial Device Information Available	Query Command Format	Output Format	Volume Device	Volume Device Information Available	Query Command Format	Output Format
Antenna	Antenna Information Available	Query Command Format	Output Format	Antenna	Antenna Information Available	Query Command Format	Output Format
MOTE 1A: CONTROL INDEX				MOTE 3A: CONTROL INDEX			
Light Sensor	Light Device Commands Available	Control Command Format	Feedback Format	Pressure Device	Pressure Device Commands Available	Control Command Format	Feedback Format
Electrical/ Magnetic Device	Electrical/ Magnetic Device Commands Available	Control Command Format	Feedback Format	Temp. Device	Temp. Device Commands Available	Control Command Format	Feedback Format
Inertial Device	Inertial Device Commands Available	Control Command Format	Feedback Format	Volume Device	Volume Device Commands Available	Control Command Format	Feedback Format
Antenna	Antenna Commands Available	Control Command Format	Feedback Format	Antenna	Antenna Commands Available	Control Command Format	Feedback Format
MOTE 1A: ROUTING/SPATIAL INDEX				MOTE 3A: ROUTING/SPATIAL INDEX			
Mote- Network Address 2A	Comm. Link Quality of Service: Good	Absolute Coordinates: Long Lat. (e.g., GPS)	Relative Coordinates (e.g., 2-d or 3-d relative to mote 1A location)	Mote- Network Address 1A	Comm. Link Quality of Service: Good	Absolute Coordinates: Long Lat. (e.g., GPS)	Relative Coordinates (e.g., 2-d or 3-d relative to mote 1A location)
Mote- Network Address 3A	Comm. Link Quality of Service: Fair	Absolute Coordinates: Long Lat. (e.g., GPS)	Relative Coordinates (e.g., 2-d or 3-d relative to mote 1A location)	Mote- Network Address 2A	Comm. Link Quality of Service: Fair	Absolute Coordinates: Long Lat. (e.g., GPS)	Relative Coordinates (e.g., 2-d or 3-d relative to mote 1A location)
Mote- Network Address 5A	Comm. Link Quality of Service: Poor	Absolute Coordinates: Long Lat. (e.g., GPS)	Relative Coordinates (e.g., 2-d or 3-d relative to mote 1A location)	Mote- Network Address 5A	Comm. Link Quality of Service: Poor	Absolute Coordinates: Long Lat. (e.g., GPS)	Relative Coordinates (e.g., 2-d or 3-d relative to mote 1A location)
				Mote- Network Address 6A	Comm. Link Quality of Service: Fair	Absolute Coordinates: Long Lat. (e.g., GPS)	Relative Coordinates (e.g., 2-d or 3-d relative to mote 1A location)

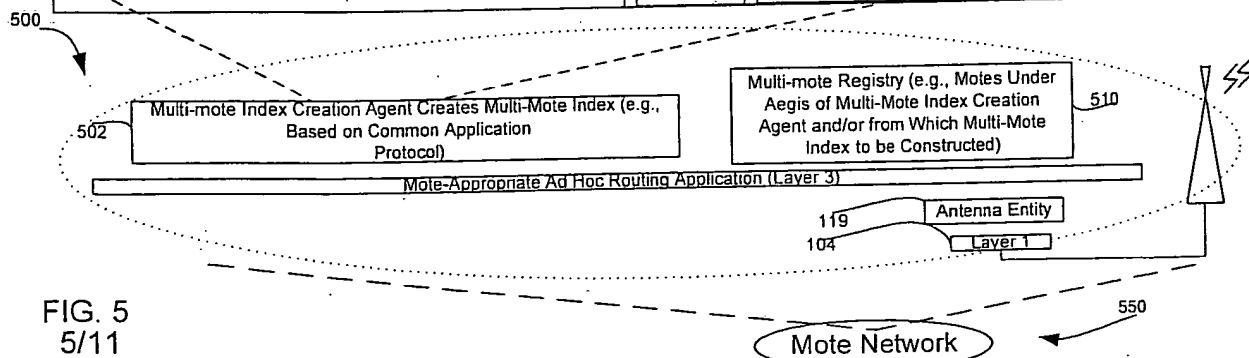


FIG. 5  
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MULTI-MOTE CONTENT INDEX ENTRY FOR MOTE ADDRESS 1A CONTENT INDEXES				MULTI-MOTE CONTENT INDEX ENTRY FOR MOTE ADDRESS 3A CONTENT INDEXES			
MOTE 1A: SENSING INDEX				MOTE 3A: SENSING INDEX			
Light Device	Light Device Information Available	Query Command Format	Output Format	Pressure Device	Pressure Device Information Available	Query Command Format	Output Format
Electrical/ Magnetic Device	Electrical/ Magnetic Device Information Available	Query Command Format	Output Format	Temp. Device	Temp. Device Information Available	Query Command Format	Output Format
Inertial Device	Inertial Device Information Available	Query Command Format	Output Format	Volume Device	Volume Device Information Available	Query Command Format	Output Format
Antenna	Antenna Information Available	Query Command Format	Output Format	Antenna	Antenna Information Available	Query Command Format	Output Format
MOTE 1A: CONTROL INDEX				MOTE 3A: CONTROL INDEX			
Light Sensor	Light Device Commands Available	Control Command Format	Feedback Format	Pressure Device	Pressure Device Commands Available	Control Command Format	Feedback Format
Electrical/ Magnetic Device	Electrical/ Magnetic Device Commands Available	Control Command Format	Feedback Format	Temp. Device	Temp. Device Commands Available	Control Command Format	Feedback Format
Inertial Device	Inertial Device Commands Available	Control Command Format	Feedback Format	Volume Device	Volume Device Commands Available	Control Command Format	Feedback Format
Antenna	Antenna Commands Available	Control Command Format	Feedback Format	Antenna	Antenna Commands Available	Control Command Format	Feedback Format
MOTE 1A: ROUTING/SPATIAL INDEX				MOTE 3A: ROUTING/SPATIAL INDEX			
Mote- Network Address 2A	Comm. Link Quality of Service: Good	Absolute Coordinates: Long Lat. (e.g., GPS)	Relative Coordinates (e.g., 2-d or 3-d relative to mote 1A location)	Mote- Network Address 1A	Comm. Link Quality of Service: Good	Absolute Coordinates: Long Lat. (e.g., GPS)	Relative Coordinates (e.g., 2-d or 3-d relative to mote 1A location)
Mote- Network Address 3A	Comm. Link Quality of Service: Fair	Absolute Coordinates: Long Lat. (e.g., GPS)	Relative Coordinates (e.g., 2-d or 3-d relative to mote 1A location)	Mote- Network Address 2A	Comm. Link Quality of Service: Fair	Absolute Coordinates: Long Lat. (e.g., GPS)	Relative Coordinates (e.g., 2-d or 3-d relative to mote 1A location)
Mote- Network Address 5A	Comm. Link Quality of Service: Poor	Absolute Coordinates: Long Lat. (e.g., GPS)	Relative Coordinates (e.g., 2-d or 3-d relative to mote 1A location)	Mote- Network Address 5A	Comm. Link Quality of Service: Poor	Absolute Coordinates: Long Lat. (e.g., GPS)	Relative Coordinates (e.g., 2-d or 3-d relative to mote 1A location)
				Mote- Network Address 6A	Comm. Link Quality of Service: Fair	Absolute Coordinates: Long Lat. (e.g., GPS)	Relative Coordinates (e.g., 2-d or 3-d relative to mote 1A location)

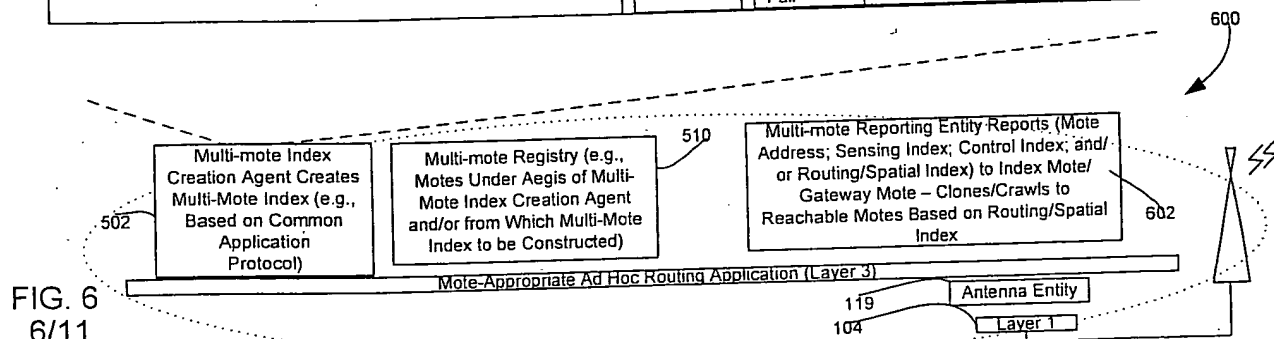


FIG. 6  
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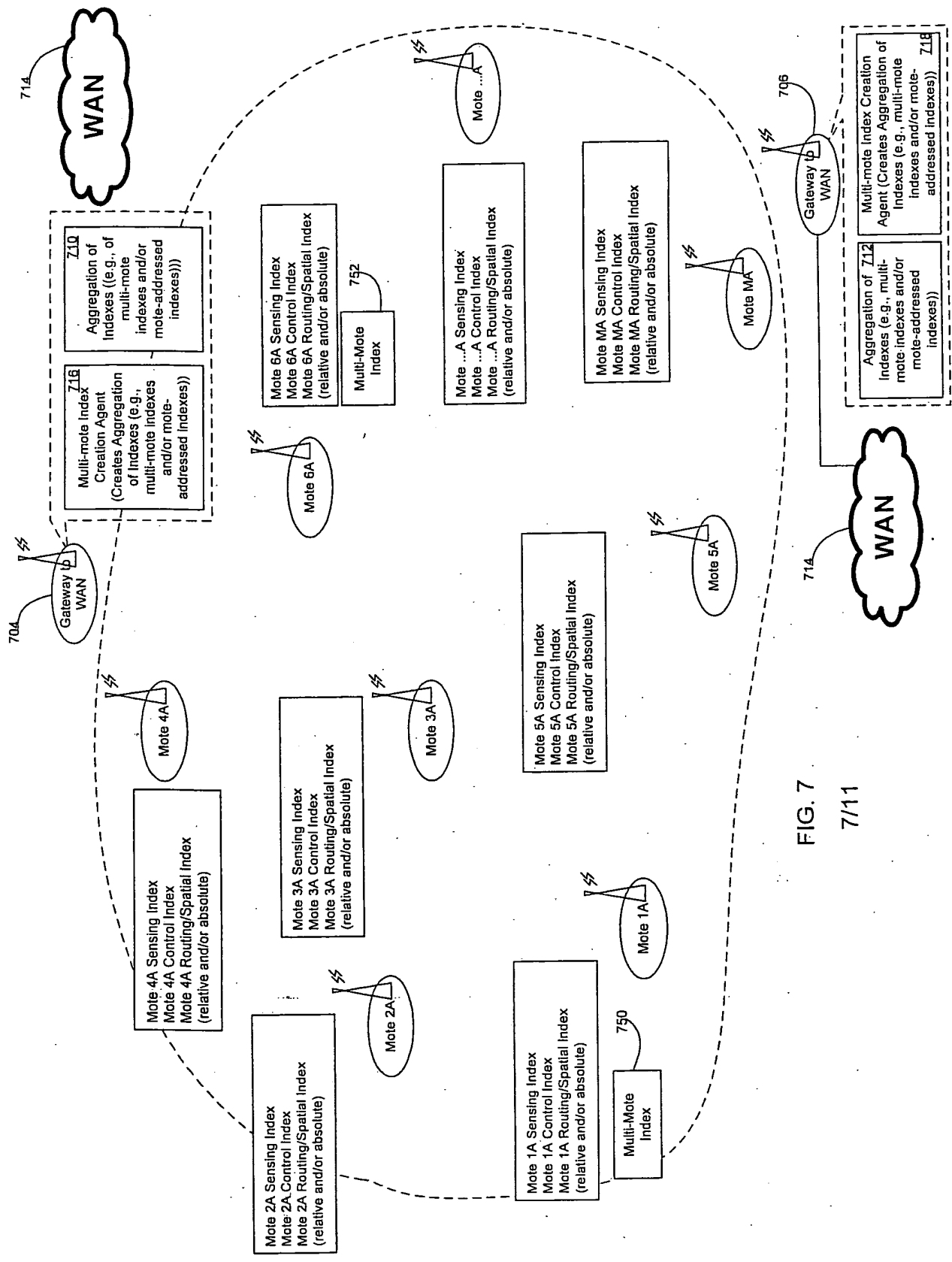


FIG. 7  
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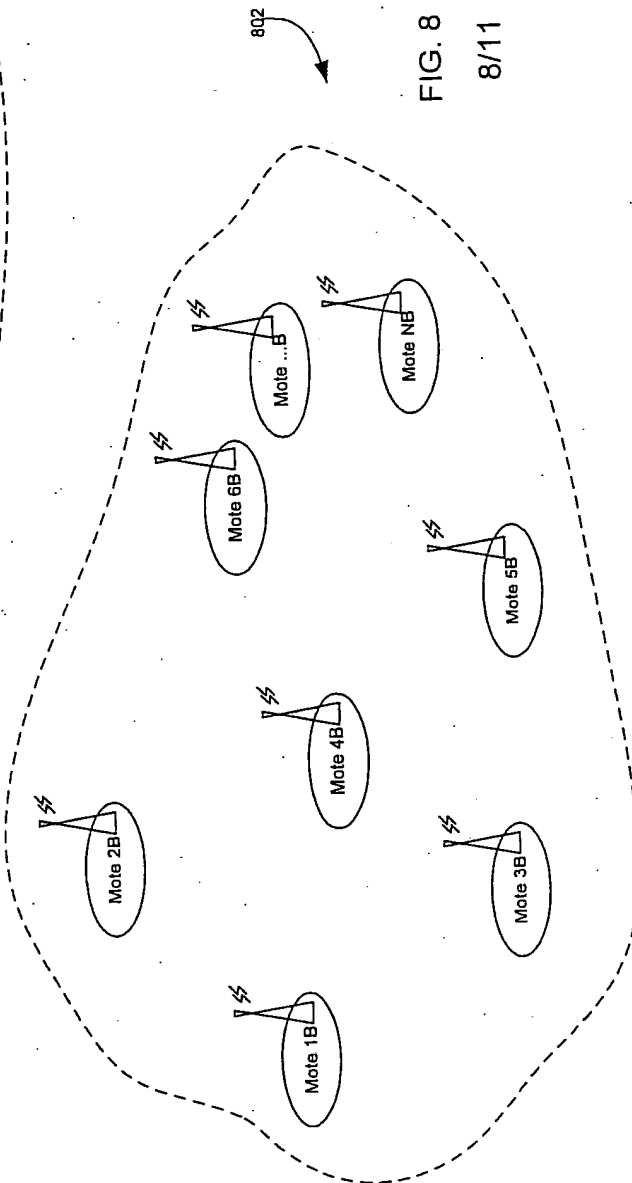
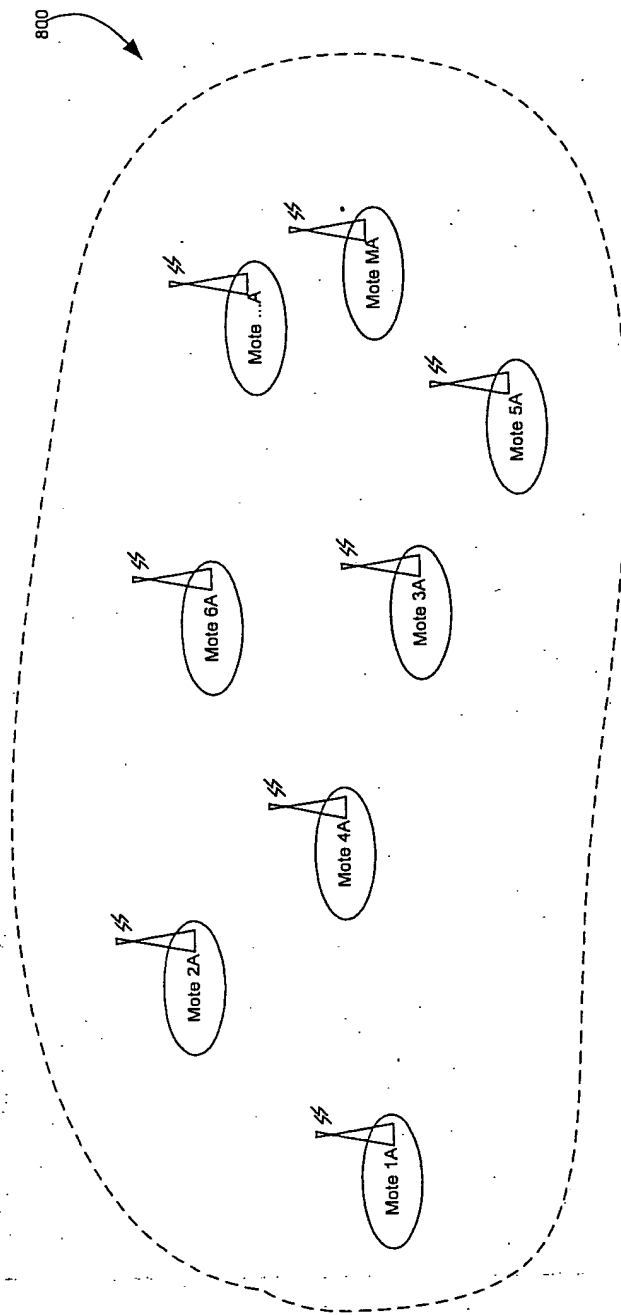
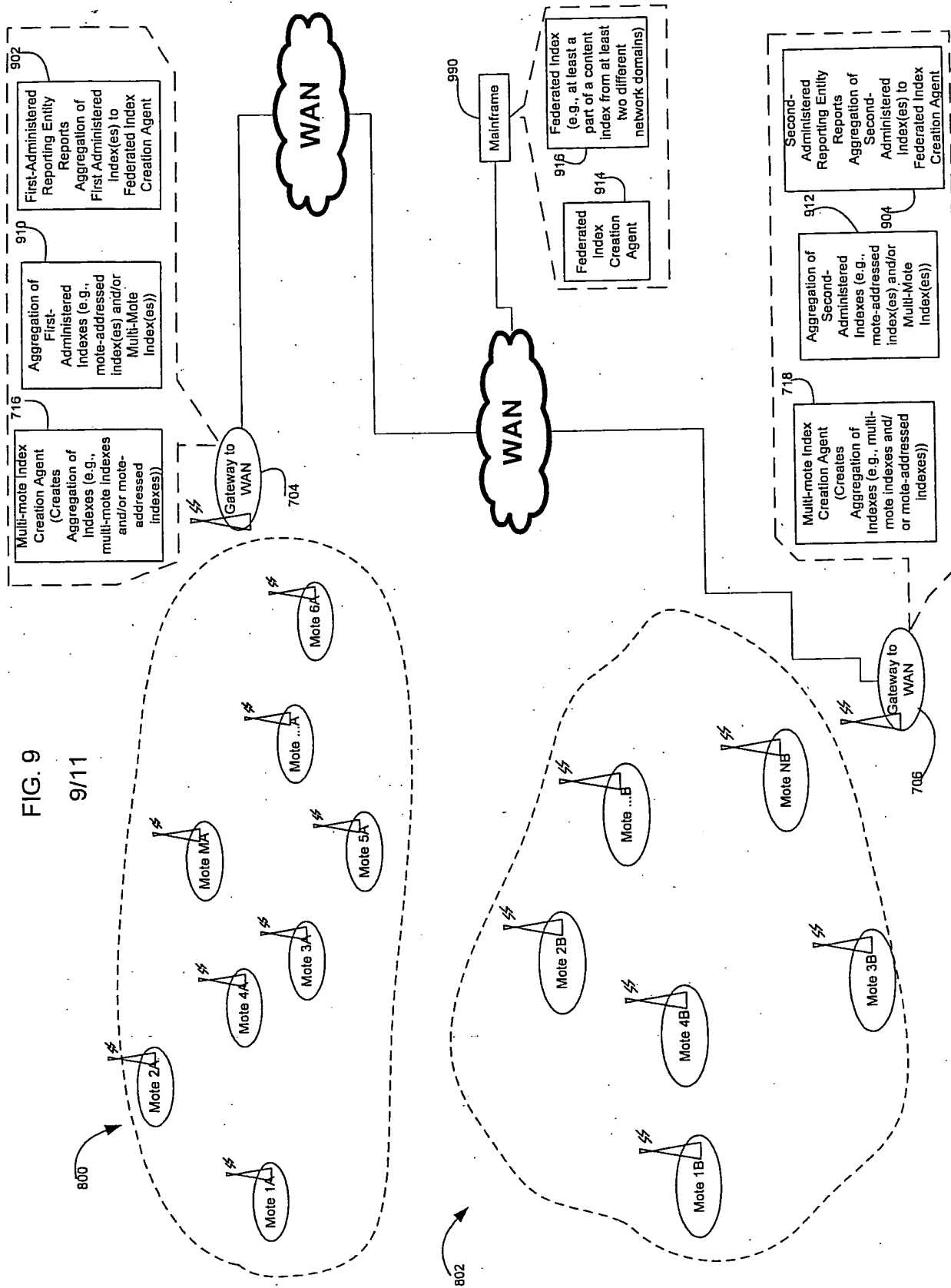


FIG. 8



FIG. 9

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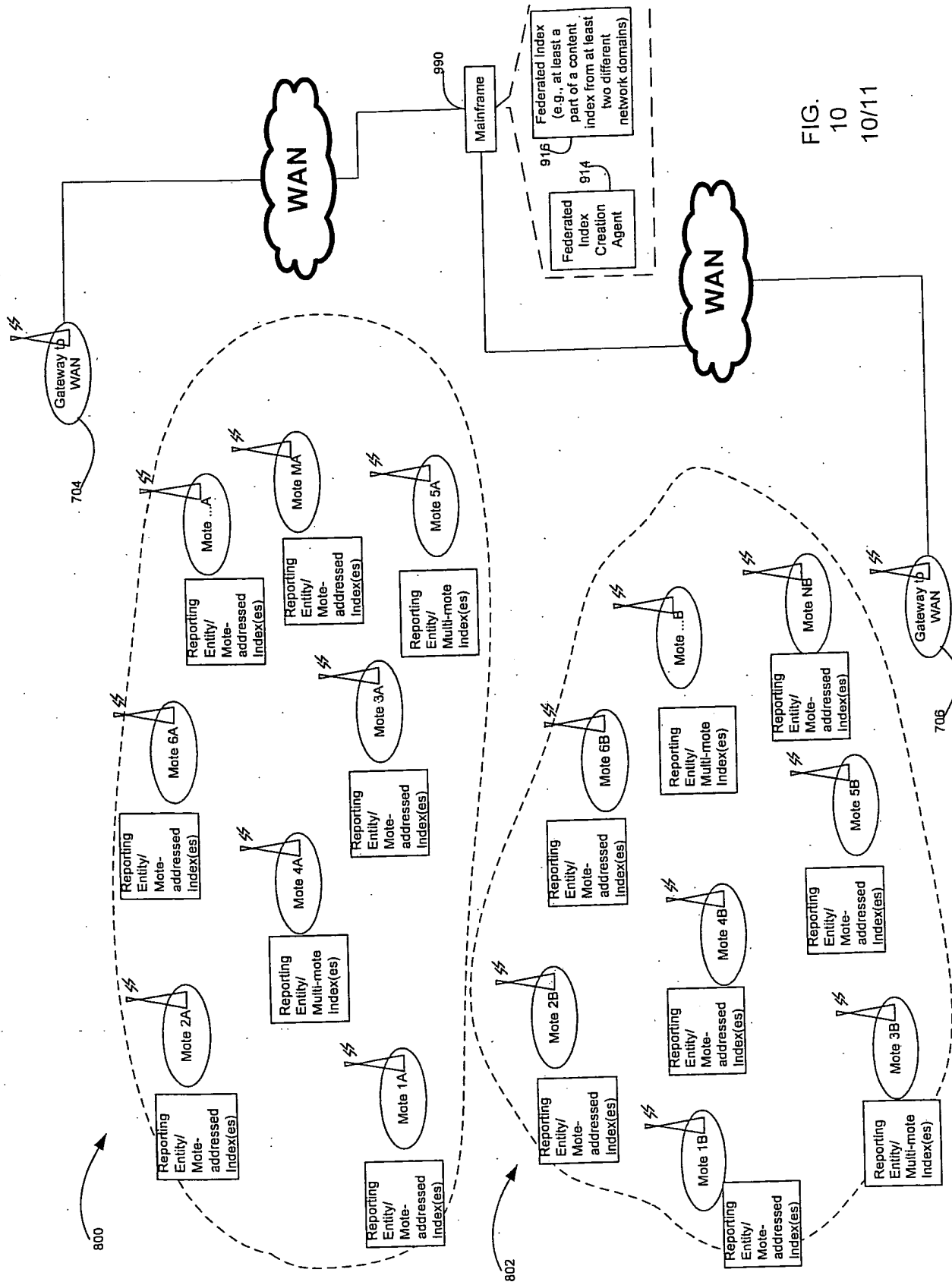


FIG.  
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Federated Mote Index for First-Administered Set of Motes and Second-Administered Set of Motes				
AGGREGATION OF CONTENT INDEXES FOR MOTE ADDRESSES 1A AND 2A OF FIRST-ADMINISTERED SET OF MOTES				
MOTE 1A OF FIRST-ADMINISTERED SET OF MOTES: SENSING INDEX				
Light Device	Light Device Information Available	Query Command Format	Output Format	
Electrical/ Magnetic Device	Electrical/ Magnetic Device Information Available	Query Command Format	Output Format	
Inertial Device	Inertial Device Information Available	Query Command Format	Output Format	
Antenna	Antenna Information Available	Query Command Format	Output Format	
MOTE 2A OF FIRST-ADMINISTERED SET OF MOTES: CONTROL INDEX				
Light Sensor	Light Device Commands Available	Control Command Format	Feedback Format	
Electrical/ Magnetic Device	Electrical/ Magnetic Device Commands Available	Control Command Format	Feedback Format	
Inertial Device	Inertial Device Commands Available	Control Command Format	Feedback Format	
Antenna	Antenna Commands Available	Control Command Format	Feedback Format	
MOTE 2A OF FIRST-ADMINISTERED SET OF MOTES: ROUTING /SPATIAL INDEX				
Mote- Network Address 2A	Comm. Link Quality of Service: Good	Absolute Coordinates: Long Lat. (e.g., GPS)	Relative Coordinates (e.g., 2-d or 3-d relative to mote 1A location)	
Mote- Network Address 3A	Comm. Link Quality of Service: Fair	Absolute Coordinates: Long Lat. (e.g., GPS)	Relative Coordinates (e.g., 2-d or 3-d relative to mote 1A location)	
Mote- Network Address 5A	Comm. Link Quality of Service: Poor	Absolute Coordinates: Long Lat. (e.g., GPS)	Relative Coordinates (e.g., 2-d or 3-d relative to mote 1A location)	
AGGREGATION OF CONTENT INDEXES FOR MOTE ADDRESSES 3A AND 4A OF SECOND-ADMINISTERED SET OF MOTES				
MOTE 3A OF SECOND-ADMINISTERED SET OF MOTES: SENSING INDEX				
Pressure Device	Pressure Device Information Available	Query Command Format	Output Format	
Temp. Device	Temp. Device Information Available	Query Command Format	Output Format	
Volume Device	Volume Device Information Available	Query Command Format	Output Format	
Antenna	Antenna Information Available	Query Command Format	Output Format	
MOTE 4A OF SECOND-ADMINISTERED SET OF MOTES: CONTROL INDEX				
Pressure Device	Pressure Device Commands Available	Control Command Format	Feedback Format	
Temp. Device	Temp. Device Commands Available	Control Command Format	Feedback Format	
Volume Device	Volume Device Commands Available	Control Command Format	Feedback Format	
Antenna	Antenna Commands Available	Control Command Format	Feedback Format	
MOTE 4A OF SECOND-ADMINISTERED SET OF MOTES: ROUTING /SPATIAL INDEX				
Mote- Network Address 1A	Comm. Link Quality of Service: Good	Absolute Coordinates: Long Lat. (e.g., GPS)	Relative Coordinates (e.g., 2-d or 3-d relative to mote 1A location)	
Mote- Network Address 2A	Comm. Link Quality of Service: Fair	Absolute Coordinates: Long Lat. (e.g., GPS)	Relative Coordinates (e.g., 2-d or 3-d relative to mote 1A location)	
Mote- Network Address 5A	Comm. Link Quality of Service: Poor	Absolute Coordinates: Long Lat. (e.g., GPS)	Relative Coordinates (e.g., 2-d or 3-d relative to mote 1A location)	
Mote- Network Address 6A	Comm. Link Quality of Service: Fair	Absolute Coordinates: Long Lat. (e.g., GPS)	Relative Coordinates (e.g., 2-d or 3-d relative to mote 1A location)	

FIG.

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